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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/572,720	08/01/2006	R. Bruce Weisman	11321-P075W0US	4669
61060	7590	06/05/2009	EXAMINER	
WINSTEAD PC			KOSLOW, CAROL M	
P.O. BOX 50784			ART UNIT	
DALLAS, TX 75201			PAPER NUMBER	
			1793	
			MAIL DATE	
			DELIVERY MODE	
			06/05/2009	
			PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/572,720

Applicant(s)

WEISMAN ET AL.

Examiner

C. Melissa Koslow

Art Unit

1793

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-10 and 76-80 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-7, 9, 10, 76, 78 and 79 is/are rejected.
- 7) ☒ Claim(s) 8, 77 and 80 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/808)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11 May 2009 has been entered.

The amendments to the claims have overcome the 35 USC 112 rejections and the 35 USC 102(a), 102(b) and 102(e) rejections. Applicant's arguments with respect to the rejection under 35 USC 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of U.S. patent 7,501,108.

Claims 1-3, 5-7, 9, 10, 76, 78 and 79 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. patent 7,501,108.

This reference teaches a printable composition of polymer coated single wall carbon nanotubes dispersed in water. The nanotubes have a diameter of 2-3 nm, which fall within the range of less than about 3 since "about 3 includes values slightly larger than 3. The nanotubes are an essentially homogenous population which were chemical derived. The nanotubes are homogenized and separated with respect to dimension. The taught polymer coatings are known binders. Since the taught nanotubes are identical to those claimed, they must inherently be fluorescent and emit light in the near infrared wavelength range. Claim 6 teaches the fluorescent of the nanotubes are tuned within a range of excitation and emission wavelengths, where the wavelength ranges are not defined. Thus the claimed ranges include all possible excitation and emission ranges possible for carbon nanotubes. The emission and excitation wavelengths of the

nanotubes are an inherent property of the tubes and thus are tuned to be within a range of excitation and emission wavelength. Therefore the taught composition meets the requirement of claim 6. Since the composition is printable, which means it is deposited onto a surface in a patterned form, it is an ink. The taught composition teaches the claimed ink.

Claims 8, 77 and 80 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

There is no teaching or suggestion in the cited art of record of a fluorescent invisible ink containing carbon nanotubes having a diameter of less than about 3 nm. The taught composition is black in color and thus not invisible. There is no teaching or suggestion in the cited art of record of a fluorescent invisible ink containing carbon nanotubes having a diameter of less than about 3 nm and where the nanotubes are homogenized by electronic type. Since the taught nanotubes contains 2/3 semiconducting and 1/3 metallic, they are not homogenized by electronic type. Finally, there no teaching or suggestion in the cited art of record of a fluorescent invisible ink containing carbon nanotubes having a diameter of less than about 3 nm and a surfactant. While reference teaches an aqueous composition containing carbon nanotubes having a diameter of less than about 3 nm and a surfactant, the taught composition are not suitable for deposition on a surface.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melissa Koslow whose telephone number is (571) 272-1371. The examiner can normally be reached on Monday-Friday from 8:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo, can be reached at (571) 272-1233.

The fax number for all official communications is (571) 273-8300.

Art Unit: 1793

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/cmk/
June 5, 2009

/C. Melissa Koslow/
Primary Examiner
Art Unit 1793